

Patent claims

1. Method of sealing plug-in connection elements of electrical line systems during the foaming in place of such elements that are to be foamed in place in components, characterized in that the entry point of the electrical lead (3) into the plug-in connection element (1) is sealed by an elastically deformable closure part (4, 11) under the pressure of the foam to be introduced.
2. Method according to Claim 1, characterized in that the closure part (4) has two flexible lip parts (5a, 5b), which lie against each other and enclose the electrical lead (3).
3. Method according to Claim 1, characterized in that the closure part (11) comprises a plug which encloses the conductor and tapers conically towards the plug-in connection element.
4. Plug-in connection element which can be foamed in place in components, for electrical line systems, comprising
 - a) the body of the plug-in connection element (1) with the necessary contacts for the electrical leads (3) and the plug-in connection and
 - b) a flexible closure part (4, 11), which closes the space between the electrical lead (3) and the body in a sealed manner under the pressure of the foam to be introduced.
5. Device according to Claim 4, characterized in that the closure part (4) has two flexible lips (5a, 5b), which lie against each other and have clearances (7, 8) for the electrical leads (3) to be led through.
6. Device according to Claim 5, characterized in that the closure part (4) is formed integrally with the body of the plug-in connection element (1).
7. Device according to Claim 5, characterized in that the closure part (4) is connected to the body of the plug-in connection element (1), preferably moulded onto it.

8. Device according to Claim 5, characterized in that the closure part (4) is fitted in a sealed manner onto the body of the plug-in connection element.

9. Device according to one of Claims 4 to 8, 5 characterized in that the flexible lips (5a, 5b) have surface-area enlargements (10) near their end.

10. Device according to Claim 4, characterized in that the opening in the body of the plug-in connection element (1) serving for the insertion of the leads 10 widens outwards and the flexible closure part (11) enclosing the leads (3) has a form corresponding to this opening.

11. Device according to Claim 10, characterized in that the closure part (11) has a collar (12) on its end 15 opposite the lead opening.

12. Device according to Claim 10 or 11, characterized in that the closure part (11) has peripheral cams or beads (13).

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